

**PASSIVE ALIGNMENT OF VCSELs TO WAVEGUIDES IN  
OPTO-ELECTRONIC CARDS AND PRINTED CIRCUIT BOARDS**

**ABSTRACT OF THE DISCLOSURE**

A method of producing opto-electronic cards and printed circuit boards which are adapted to provide for passive alignment of VCSELs to waveguides. Also provided are opto-electronic cards and printed circuit boards which incorporate structure providing for the passive alignment of VCSELs to waveguides.